

## **STEPPED TIME BASED SERVO PATTERN AND HEAD**

### **ABSTRACT**

The present invention relates to a method of synthesizing the slanted transitions in a time based servo pattern using servo write gaps that are perpendicular to the tape motion. The present invention particularly relates to a method of writing a servo pattern on magnetic tape so as to minimize errors in the servo pattern. The slanted transitions in a time-based servo pattern are synthesized using servo write gaps that are perpendicular to the tape motion. The slanted portions of the write gaps are synthesized by a series of short segmented vertical and horizontal segments. In so minimizing errors, distortion in the reading and/or writing of the data tracks can be prevented.